What is claimed is:

1. A system for analyzing the performance of a network comprising:

at least one DCA located on a network and which collects performance data including a first plurality of measurements of a single network parameter and at least a first set of measurements including at least a single measurement of the single network parameter, each of the first plurality of measurements taken at a different time;

a processing module interconnected with the DCA and which calculates at least a first variance statistic and a second variance statistic, the first variance statistic being a variance statistic of the first plurality of measurements and the second variance statistic being a variance statistic of the first set of measurements; and

a comparison module interconnected with the processing module and which compares the first variance statistic with at least the second variance statistic to determine if a predetermined relationship exists between the first variance statistic and the second variance statistic.

2. The system of claim 1 wherein each of the first plurality of measurements is taken on a periodic basis over a first period of time and each of the first set of measurements is taken over a second period of time.

3. The system of claim 2 wherein the second period of time is included within the first period of time.

4. The system of claim 2 further including a data storage module interconnected to the DCA and the processing module for storing at least the first plurality of measurements and the first set of measurements and wherein the second period of time is not included within the first period of time.

5. The system of claim 2 wherein:

the processing module also calculates the standard deviation of the first plurality of measurements; and

the comparison module determines if the value of the second variance statistic is within a predetermined multiple of the standard deviation of the value of the first variance statistic.

6. The system of claim 5 wherein the comparison module determines if the value of the second variance statistic is more than one standard deviation from the value of the first variance statistic.

7. The system of claim 5 wherein the comparison module determines if the value of the second variance statistic is within one of either a first range and a second range of the value of the first variance statistic, the first range defined by the values greater than one but less than or equal to two standard deviations from the value of the first variance statistic and the second range defined by the values greater than two standard deviations from the value of the first variance statistic.

8. The system of claim 5 wherein the variance statistic includes an average value.

9. The system of claim 1 including a user display for displaying at least the first variance statistic and the second variance statistic.

10. A method of analyzing the performance of a network including:

collecting at a first plurality of measurements of a single network parameter, each of the first plurality of measurements taken at a different time;

collecting at least a first set of measurements including at least a single measurement of the single network parameter;

calculating a first variance statistic associated with the first plurality of measurements;

calculating at least a second variance statistic associated with the first set of measurements; and

comparing the first variance statistic with at least the second variance statistic to determine if a predetermined relationship exists therebetween.

11. The method of claim 10 wherein:

the step of collecting a first plurality of measurements includes taking each of the first plurality of measurements on a periodic basis over a first period of time; and

the step of collecting a first set of measurements includes taking each of the first set of measurements over a second period of time.

12. The method of claim 10 wherein the second period of time is included within the first period of time.

13. The method of claim 10 further including storing at least the first plurality of measurements and the first set of measurements in a data storage facility.

14. The method of claim 13 wherein the second period of time is not included within the first period of time.

15. The method of claim 10 further including the step of calculating the standard deviation of the first plurality of measurements and wherein the step of comparing the first variance statistic to the second variance statistic includes determining if the value of the second variance statistic is within a predetermined multiple of the value of the standard deviation of the value of the first variance statistic.

16. The method of claim 15 wherein the step of comparing the first variance statistic to the second variance statistic includes determining if the second variance statistic is more than one standard deviation from the first variance statistic.

17. The method of claim 16 wherein the step of comparing the first variance statistic to the second variance statistic includes determining if the value of the second variance

statistic is within one of either a first range and a second range, the first range defined by the values greater than one but less than or equal to 2 standard deviations from the value of the first variance statistic and the second range defined by the values greater than two standard deviations from the value of the first variance statistic.

18. The method of claim 10 wherein:

the step of calculating a first variance statistic includes calculating an average value equal to the average value of the first plurality of measurements; and

the step of calculating a second variance statistic includes calculating an average value equal to the average value of the first set of measurements.

19. The method of claim 10 further including displaying at least the first variance statistic, the second variance statistic and the results of the comparison therebetween on a user display.

20. A method of analyzing the performance of a network including:

collecting at a first plurality of measurements of a single network parameter, each of the first plurality of measurements taken at a different time;

collecting at least a first set of measurements including at least a single measurement of the single network parameter;

calculating a first variance statistic associated with the first plurality of measurements;

calculating at least a second variance statistic associated with the first set of measurements; and

displaying at least the first variance statistic and the second variance statistic on a user screen display.

21. A system for analyzing the performance of a network comprising:

at least one DCA located on a network and which collects performance data including a first plurality of measurements of a single network parameter and at least a first set of measurements including at least a single

measurement of the single network parameter, each of the first plurality of measurements taken at a different time;

a processing module interconnected with the DCA and which calculates at least a first variance statistic and a second variance statistic, the first variance statistic being a variance statistic of the first plurality of measurements and the second variance statistic being a variance statistic of the first set of measurements; and

a user display for displaying at least the first variance statistic and the second variance statistic.